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TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	09/871383	
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	First Named Inventor	Edlin Solomon	
	Art Unit	2815	
	Examiner Name	Nguyen Joseph	
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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	Edlin Solomon
Signature	<i>Edlin Solomon</i>
Date	05.28.2004

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Examiner -- Joseph Nguyen
Applicant -- Edlin Solomon
Reply mailed 05.28.2004.
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Reply No.9 to Notice received on 10.18.2002.

H01L 29/06
H01L 29/70

BIDIRECTIONAL BIPOLAR STATIC INDUCTION DEVICE

"paragraph 0006". This result is achieved by disposing elements of the bipolar static induction transistors: ~~[[two]]~~ a gate, ~~[[four]]~~ sources and channels ~~and six electrodes~~ on either side of a lightly doped n-type silicon monocrystal substrate, and besides one ~~of said~~ channels channel of the multielemental structure is thicker than the other normally-off channels on either side of said substrate and said ~~thick channels are~~ channel is connected to the separate electrode on either side of said substrate.

"between paragraph 0006 and 0007". This result is achieved by a layer of a doped n+-type polysilicon is disposed on the silicon monocrystal surface.

This result is achieved by the control over both hole emission into and extraction out the lightly doped area are used as well as the current feedback for said control over emission into one.

This result is achieved by the thickness of said channels are small and the impurity concentration near said gates is high enough.

"paragraph 0007". This result is achieved by disposing an epitaxial ~~layers~~ layer of the same type of conductivity with the impurity concentration about $10 \cdot 10^{17} \text{ cm}^{-3}$ on either side of said substrate; said gate, said sources and said channels are disposed in said epitaxial ~~layers~~ layer.

"between paragraph 0007 and 0008". This result is achieved by a layer of a doped n+-type polysilicon is disposed on the silicon monocrystal surface.

This result is achieved by said thick ~~channels are~~ channel is normally-on ~~[[ones]]~~ one.

"paragraph 0008. The offered transistors and transistor-thyristors can be applied for production, transfer and use of electric energy within a very broad range of power: from the control of electrical soldering to the control of most powerful turbogenerators and thermonuclear stations. They are effective for designing electronic transformers, power supply units, and "flexible transfers of alternating current". In the latter case ~~transistors~~ transistor-thyristors can be connected in series, which will allow to easily create high voltage system with operating voltage $10 \cdot 10^6 \text{ V}$ and more with a control with light signals or by wireless. These transistors can be most widely used in the devices aimed at defending people from electric shock. They can also be used in systems with the unipolar power supply transmitting energy in both directions -- both from a source to a load (resonator) and from the load to the source. It will make it possible to